### DO24145

#### 510(K) SUMMARY

Submitter of 510(k):

SB LUCIUS, INC.

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Contact person:

Dae Kyu Chang

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Date of Summary:

Dec 15, 2002

Trade name:

AIGIS-XO

Common:

Dental casting alloy

Classification name:

Gold based alloys and precious metal alloys for

clinical use

Product code:

EJT

Classification:

Class II

Legally marketed device: BIOCCLUS 4

510(k) number: K960104

SUMMARY OF THE TECHNOLOGICAL CHARACTERISTICS

Test methods applied: as in ANSI/ADA 5 and ISO 9693

#### Comparison of composition:

#### **COMPOSITION (WEIGHT %)**

Device Name	Au	Pt	Pd	Ag	CÚ	Zn	IR/In
BIOCCLUS 4	85.8	11.0	-	-	-	0.05	<1.0
AIGIS-XO	56.0	0.05	2.5	30.0	9.92	1.0	0.08

#### Comparison of physical and mechanical properties:

Alloy	Melting Point	Hardness	Yield	Elongation	Density
Alloy	Range (°F)	(Vickers)	Strength	(%)	(g/cm3)
	_ , ,	,	(MPa)		
BIOCCLUS 4	1,822 -1,966	150	360	12	19.0
AIGIS-XO	1,813-1,847	133	225	46	16.97

#### Discussion:

Since the composition of the legally marketed alloy and the new device is very similar, it may be assumed that the biological compatibility of the alloys is also very similar.

#### Conclusion:

The main elements and their concentration are almost identical. AIGIS-XO is an inlay, onlay, crown and bridge alloy. This device is dependable 82% gold alloy with a high gold appearance. AIGIS-XO is excellent for inlays, three-quarter crowns, long and short-span bridges. AIGIS-XO is substantially equivalent to BIOCCLUS 4 and the minor differences between them do not affect safety or effectiveness.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

#### MAR 0 7 2003

Mr. Dae-Kyu Chang SB LUCIUS, Incorporated 9778 Katella Avenue, Suite 205 Anaheim, California 92804

Re: K024145

Trade/Device Name: AIGIS-XO Regulation Number: 872.3060

Regulation Name: Gold-based Alloys and Precious Metal Alloys for Clinical Use

Regulatory Class: II Product Code: EJT

Dated: December 15, 2002 Received: December 16, 200

#### Dear Mr. Chang

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4613. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Susan Runner, DDS, MA

Susan Punser.

Interim Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices Office of Device Evaluation Center for Devices and

Radiological Health

Enclosure

# SB LUCIUS, INC. 9778 Katella Ave. Ste. 205, Anaheim, CA 92804

Phone: (714) 530-2814, Fax: (714) 530-3448,

## INDICATIONS FOR USE

510(K) Number: <u>K624145</u>
Device Name(s): AIGIS-XO
AIGIS-XO is intended for manufacturing
<ul> <li>Inlay / Onlays</li> <li>Crowns</li> <li>Short span bridges</li> <li>Long span bridges</li> <li>Removable partials</li> </ul>
(PLEASE DO NOT WRITE BELOW THIS LINE CONTINUE ON ANOTHER PAGE IF NEEDED)
CONCURRENCE OF CHRD, OFFICE OF DEVICE EVALUATION (OED)  Release DDS for Dy K. Muly (Division Sign-Off) Division of Anesthesiology, General Hospital, Infection Control, Dental Devices 510(k) Number: KORHING

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